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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/771,963 | 02/04/2004 | Ryan L. Roach | 23455/P-6223 | 3837 |

27784 7590 07/13/2004

LAW OFFICE OF LAWRENCE E. LAUBSCHER, JR.
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| EXAMINER |
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BLAU, STEPHEN LUTHER

| ART UNIT | PAPER NUMBER |
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3711

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

YW

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|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/771,963 | Applicant(s) ROACH ET AL. | |
| | Examiner Stephen L. Blau | Art Unit 3711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 is/are pending in the application.
 4a) Of the above claim(s) 14-16 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 11-13 and 17 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/12/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Types of inserts top to bottom

- a. Species 1 (inserts with different thickness from top to bottom): Claims 11-13.
- b. Species 2 (inserts with different materials from top to bottom): Claims 14-16.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 17 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mr. Lawrence E. Laubscher on 9 July 2004 a provisional election was made without traverse to prosecute the invention of species 1, claims 11-13 and 17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

3. Claims 11-13 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 17 contains new matter. Claim 17 recites the limitation of at least one of the thickness and density of said inserts increasing within the set of golf clubs as the loft of a club increases and the other of the

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thickness and density of said inserts decreasing within the set of golf clubs as the loft of a club increases. Nowhere in the original specification and claims is it disclosed that thickness or density of said inserts decrease within the set of golf clubs as the loft of a club increases.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi and Shaw.

Kobayashi discloses a thickness of an insert increasing within a set of clubs as the loft increases (Figures 4a-c, Col. 5, Lns. 51 through Col. 6, Ln. 14) and heads having inserts (Figs. 4a-4b).

Kobayashi lacks the density of inserts increasing within a set of clubs as loft of a club increases, an insert being thicker at a top than at a bottom, and an insert being thicker at a bottom than at a top.

Shaw discloses the specific gravity of a face piece component increasing from long irons to short irons (Col. 3, Lns. 32-35), selecting face piece materials to control


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characteristics as weight, flexural modulus, and resilience (Col. 2, Lns. 13-25), adjusting face thickness within one face piece to create effects for mass distribution (Col. 4, Lns. 1-18), adjusting the number of layers of a face in order to modify weight and hardness (Col. 4, Lns. 19-22), an insert being thicker at a top than at a bottom in order to lower the center of gravity the increase the launch angle (Col. 3, Lns. 64 through Col. 4, Ln. 2), and an insert being thicker at a bottom than at a top in order to have a high center of gravity to lower launch angle (Col. 4, Lns. 2-18). In view of the patent of Shaw it would have been obvious to modify the set of clubs of Kobayashi to have the density of inserts increasing within a set of clubs as loft of a club increases in order to utilize the type of material in addition to face thickness to design heads within a set where the rigidity increases for a face as loft increases so that there are less alignment errors introduced to a ball at impact due to the face flexing at impact for short irons and there is more distance imparted to a ball at impact for long irons due to the face flexing. This would give the designer more flexibility in controlling overall weight distribution in addition to designing face rigidity. In view of the patent of Shaw it would have been obvious to modify the set of clubs of Kobayashi to have an insert being thicker at a top than at a bottom in order to lower the center of gravity the increase the launch angle and an insert being thicker at a bottom than at a top in order to have a high center of gravity to lower launch angle.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (703) 308-1513. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 10 July 2004



STEPHEN BLAU
PRIMARY EXAMINER